

CLAIMS:

We claim:

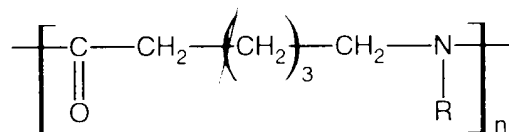
1. An adhesive comprising a polyamide and electrically conductive filler.

2. An adhesive in accordance with claim 1, wherein said polyamide is an alcohol-soluble polyamide.

3. An adhesive in accordance with claim 2, wherein said alcohol-soluble polyamide comprises pendant groups selected from the group consisting of methoxy, ethoxy and hydroxy pendant groups.

4. An adhesive in accordance with claim 3, wherein said pendant groups are methylene methoxy pendant groups.

5. An adhesive in accordance with claim 1, wherein said polyamide has the following general formula:



wherein R is selected from the group consisting of hydrogen; alkyl having from about 1 to about 20 carbons, alkoxy having from about 1 to about 20 carbons, alkyl alkoxy having from about 1 to about 20 carbons, and alkylene alkoxy having from about 1 to about 20 carbons, and n is a number of from about 50 to about 1,000.

6. An adhesive in accordance with claim 5, wherein R is a methylene methoxy group.

7. An adhesive in accordance with claim 1, wherein said electrically conductive filler is a quaternary ammonium salt.

8. An adhesive in accordance with claim 1, wherein said electrically conductive filler is selected from the group consisting of carbon fillers, metal oxide fillers, polymer fillers, charge transporting molecules, and mixtures thereof.

9. An adhesive in accordance with claim 8, wherein said electrically conductive filler is a carbon filler selected from the group consisting of carbon black, graphite, fluorinated carbon, and mixtures thereof.

10. An adhesive in accordance with claim 9, wherein said carbon filler is a fluorinated carbon filler.

11. An adhesive in accordance with claim 8, wherein said electrically conductive filler is a metal oxide filler selected from the group consisting of titanium dioxide, tin oxide, indium oxide, iron oxide, aluminum oxide, and mixtures thereof.

12. An adhesive in accordance with claim 8, wherein said electrically conductive filler is a polymer filler selected from the group consisting of polypyrrole, polyacrylonitrile, polythiophene, polyaniline and mixtures thereof.

13. An adhesive in accordance with claim 12, wherein said polymer is pyrolyzed polyacrylonitrile.

14. An adhesive in accordance with claim 8, wherein said electrically conductive filler is a charge transporting molecule selected from the group consisting of bis(dihydroxy diethylamino) triphenyl methane, bis(diethylamino) triphenyl methane, dihydroxy tetraphenyl biphenylene diamine, and mixtures thereof.

15. An adhesive in accordance with claim 1, wherein said adhesive is crosslinked.

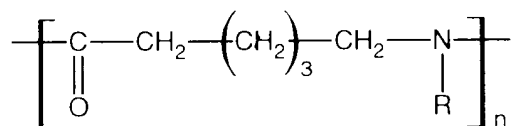
16. An adhesive in accordance with claim 15, wherein said adhesive is crosslinked using oxalic acid as a crosslinking agent.

17. An adhesive in accordance with claim 1, wherein said adhesive has a volume resistivity of from about 10^1 to about 10^{13} ohms-cm.

18. An adhesive in accordance with claim 15, wherein said adhesive has a volume resistivity of from about 10^9 to about 10^{11} ohm-cm.

19. An adhesive comprising an alcohol soluble polyamide and an electrically conductive filler.

20. An adhesive comprising a polyamide having the following general formula:



wherein R is selected from the group consisting of hydrogen; alkyl having from about 1 to about 20 carbons, alkoxy having from about 1 to about 20 carbons, alkyl alkoxy having from about 1 to about 20 carbons, and alkylene alkoxy having from about 1 to about 20 carbons, and wherein n is a number of from about 50 to about 1,000.